



PLEASE NOTE:

VOLUME LII of the Transactions of the Royal Society of Canada (1958) consists of The Proceedings and the papers of Sections II, III, IV and V only.

SECTION I has decided not to publish any papers in the 1958 Transactions.

THE ROYAL SOCIETY OF ~~CANADA~~

LA SOCIÉTÉ ROYALE DU CANADA

MÉMOIRES  
ET  
COMPTES RENDUS  
DE  
LA SOCIÉTÉ ROYALE  
DU  
CANADA

TROISIÈME SÉRIE—TOME LII  
SÉANCE DE JUIN 1958

OTTAWA  
IMPRIMÉ POUR LA SOCIÉTÉ ROYALE DU CANADA  
1958

PROCEEDINGS  
AND  
TRANSACTIONS  
OF  
THE ROYAL SOCIETY  
OF  
CANADA

THIRD SERIES—VOLUME LII  
MEETING OF JUNE, 1958

OTTAWA  
THE ROYAL SOCIETY OF CANADA  
1958

## NOTE

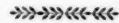
Volume LII of the Proceedings and Transactions of the Royal Society of Canada (1958) consists of the Proceedings and the papers of Sections II, III, IV, and V *only*.

Section I has decided not to publish any papers in the 1958 Transactions.

Veillez noter que le Tome LII des Mémoires et comptes rendus de la Société royale du Canada (1958) comprend les Procès-verbaux et les Mémoires des Sections II, III, IV, et V *seulement*.

La Section I a décidé de ne pas publier de communications dans le volume de 1958.

## TABLE OF CONTENTS



|   |    |
|---|----|
| List of Officers of the Society . . . . .   | 1  |
| Committees appointed for the year 1958-59 . . . . .   | 2  |
| List of Fellows . . . . .   | 5  |
| List of Corresponding Members . . . . .   | 25 |
| Awards of Chauveau, Flavelle, Henry Marshall Tory, Lorne Pierce,<br>Tyrrell, Willet G. Miller Medals and Harrison Prize . . . . . | 25 |
| List of Presidents . . . . .  | 27 |
| List of Presidents of Sections . . . . .  | 27 |
| Associated Organizations . . . . .  | 28 |
| <br>Report of the Honorary Secretary for the year 1957-58   |    |
| Council Meetings . . . . .  | 29 |
| Minutes of the Seventy-Sixth Annual Meeting . . . . .   | 30 |
| <br>Presentation of Medals  |    |
| Flavelle Medal: Allan Grant Lochhead . . . . .  | 43 |
| Lorne Pierce Medal: Northrop Frye . . . . .   | 44 |
| Tyrrell Medal: William Lewis Morton . . . . .   | 45 |
| <br>Reports of Sections . . . . .   | 47 |

### APPENDICES

#### APPENDIX A

|  |    |
|--|----|
| Presidential Address, "The Evolution of Evolution," by<br>THOMAS W. M. CAMERON . . . . . | 55 |
|--|----|

#### APPENDIX B

|   |     |
|---|-----|
| Biographical Sketches of Deceased Members |     |
| Arthur Lewis Clark . . . . .              | 71  |
| Cyrille Fraser Delâge . . . . .           | 77  |
| Alexander Joseph Denomy . . . . .         | 81  |
| Carl Faessler . . . . .                   | 85  |
| John Beresford Leathes . . . . .          | 89  |
| Chester Martin . . . . .                  | 93  |
| William Rowan . . . . .                   | 99  |
| Joseph Burr Tyrrell . . . . .             | 105 |

#### APPENDIX C

|  |     |
|--|-----|
| Titles and Abstracts of Papers presented at the Annual Meeting . . . . . | 111 |
|--|-----|

## SECTION II

|  |    |
|--|----|
| <i>The Revival of Conservatism in North America.</i> By FRANK H. UNDERHILL, F.R.S.C. . . . .             | 1  |
| <i>The Mountain Family Circle: A Study in Canadian Urban Culture.</i> By D. C. MASTERS, F.R.S.C. . . . . | 21 |
| <i>"Christian" Views of History: Toynbee and Butterfield.</i> By HILDA NEATBY, F.R.S.C. . . . .          | 33 |
| <i>The Roman Army and the Disintegration of the Roman Empire.</i> By E. T. SALMON, F.R.S.C. . . . .      | 43 |
| SYMPOSIUM: "AN ATTACK ON THE CRISIS: THE SCHOLAR TALKS BACK"   |    |
| <i>Sputnik—Now.</i> By W. T. EASTERBROOK, F.R.S.C. . . . .   | 61 |
| <i>"And God said, Let there be light."</i> By F. M. SALTER, F.R.S.C. . . . .                             | 69 |

## SECTION III

A SYMPOSIUM ON PHYSICAL METHODS OF  
ORGANIC CHEMISTRY

|   |    |
|---|----|
| I. <i>The Use of Radioactive Isotopes.</i> By LÉO MARION, F.R.S.C. . . . .              | 1  |
| II. <i>Infrared Spectrometry.</i> By R. NORMAN JONES, F.R.S.C. . . . .                  | 9  |
| III. <i>Nuclear Magnetic Resonance Spectroscopy.</i> By R. U. LEMIEUX, F.R.S.C. . . . . | 31 |

## SECTION IV

|  |   |
|--|---|
| <i>Co-ordination of Geological Surveys in Canada.</i> Presidential Address, by H. C. RICKABY, F.R.S.C. . . . . | 1 |
|--|---|

|  |    |
|--|----|
| <i>Structural Features of the Northern Part of the Labrador Trough.</i><br>By R. BÉLAND and P. E. AUGER, F.R.S.C. . . . .              | 5  |
| <i>Palaeomagnetism and Continental Drift.</i> By P. M. DU BOIS . . . .   | 17 |
| <i>The Jurassic System in Northern Canada.</i> By HANS FREBOLD, F.R.S.C.   | 27 |
| <i>Teaching the Geological Sciences.</i> By G. B. LANGFORD, F.R.S.C. . . .   | 39 |
| <i>Brachiopod Zones of the Mount Head and Etherington Formations,</i><br><i>Southern Canadian Rockies.</i> By SAMUEL J. NELSON . . . . | 45 |
| <i>The Nikanassin-Luscar Hiatus in the Canadian Rockies.</i> By P. S.<br>WARREN, F.R.S.C., and C. R. STELCK . . . . .                  | 55 |

## SECTION V

|  |    |
|--|----|
| <i>Hypoglycaemia and Hyperinsulinism.</i> Presidential Address, by WALTER<br>R. CAMPBELL, F.R.S.C. . . . .                           | 1  |
| <i>The Soil Microflora, the Plant, and the Root Pathogen.</i> Flavelle Medal-<br>list's Address, by A. G. LOCHHEAD, F.R.S.C. . . . . | 17 |
| <i>The Origin and Speciation of Oncorhynchus.</i> By FERRIS NEAVE,<br>F.R.S.C. . . . .   | 25 |
| <i>Palaeobotanical Evaluation of Fossil Wood in Onakawana Lignites.</i> By<br>NORMAN W. RADFORTH . . . . .                           | 41 |
| <i>Polarity in the Early Embryogeny of Ginkgo biloba L.</i> By NORMAN W.<br>RADFORTH, PETER TRIP, and J. M. BONGA . . . . .          | 55 |